



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,796	12/27/2001	Min Yong Hwang	P-0310	1387
34610	7590	04/03/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			HALIYUR, VENKATESH N	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/026,796	Applicant(s) HWANG, MIN YONG	
	Examiner Venkatesh Haliyur	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-12,14,15 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-12,14,15 and 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is in response to the amendment filed on 1/18/2006. Claims 5,13,16,20 were cancelled. Claims 1-4,6-12,14-15,17-19 are pending in the application.
2. The indicated allowability of claims 4,5,10,12,13,16,20 is withdrawn in view of the newly discovered reference(s) to Asthana et al. Rejections based on the newly cited reference(s) follow.

Claim Objections

3. Claims 17,18 are objected to because of the following informalities: Claims 17 & 18 are dependent up on a cancelled claim number 16. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

Art Unit: 2616

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4,6-12,14,15,17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Asthana et al. **[US Reg: H1,859]**.

Regarding claims 1,9, Asthana et al. disclosed in their invention of "System and Method for Controlling Redundant Components", a method for multiplexing a specialized resource (**redundant components**) of a network peripheral, comprising of a plurality of specialized resources (**item 93 of Fig 3**) that provide services to subscriber calls contacting a network (**Telephony support module, item 86 & 88 of Fig 3**), a plurality of modules (**Network management servers, items 106 & 108 of Fig 3**) that manage a number of specialized resource groups, a main processor that manages the plurality of modules and collects state information from each of the plurality of modules (**item 98 & 100 of Fig 3**), a resource management block that restores a service to a subscriber call disrupted by a faulty one of the plurality of specialized resources in accordance with the state information collected by the main processor (**connection server/connection client items 99 & 101 of Fig 3**), a means for isolating the faulty one of the plurality of specialized resources and a means for generating a multiplexing message, according to the collected state information (**status message**) and depressively transmitting the multiplexing message to particular modules of the plurality of modules, having a small load and a particular specialized resource available to

Art Unit: 2616

replace the isolated specialized resource **[Figs 1-5, col 2, lines 4-67, col 3, lines 1-11, col 4, lines 53-67, cols 5-10, lines 1-67, col 11, lines 1-19, col 12, lines 51-67]**.

Regarding claims 2-4, Asthana et al. disclosed resource management block **(connection server/connection client items 99 & 101 of Fig 3)**, a means for collecting information about the service performed by the isolated specialized resource **(item 93 of Fig 3)** and information about the particular specialized resource available to replace the isolated specialized resource **(status messages)**, a means for resuming the service disrupted by the faulty one of the plurality of specialized resources and multiplexing message is generated for each subscriber call disrupted by a faulty one of the plurality of specialized resources and the multiplexing message **(one or more status messages can be received)** includes information identifying a number of a particular module having the particular specialized resource available, an index of the particular specialized resource **(active or standby)**, and a type of the service disrupted by the faulty one of the plurality of specialized resources **(activating corresponding resource type if failure of items 164,170,190,200,210,220,230 of Fig 5 happens)** **[Figs 3-5, col 2, lines 23-64, col 8, lines 35-65, columns 9-14, lines 1-67]**.

Regarding claims 6-8,10-12,14 Asthana et al. disclosed the state information **(status message)** comprises specialized resource number information, indicating the number of specialized resources supported by the corresponding module, and a specialized resource state bit map indicating a state of each of the specialized resources supported by the corresponding module **(receive status messages from resource modules that has corresponding type of module information, Fig. 5)** and

Art Unit: 2616

the state information is collected from all of the plurality of modules of the network peripheral and resource management block is a virtual device implemented by software and the state information (**status message**) is periodically collected (**connection clients query the network management servers, col 9, lines 10-15**) from all of the modules [**Fig 2-5, col 4, lines 53-67, columns 5-7, lines 1-67, col 8, lines 35-65, col 9, lines 1-17, col 12, lines 42-67, col 13, lines 1-7**].

Regarding claims 15,17,18 Asthana et al. disclosed a method for detecting a fault in a resource (**item 98 of Fig 3 detects the fault, col 10, lines 1-67**), identifying a service performed by the resource experiencing the fault, identifying another resource that provides the service and that is available (**based on the type of resource modules failed**), among the plurality of modules, assigning the other resource to support the service for a subscriber call, based on an assignment scheme (**active and standby or other available redundant modules, col 9, lines 61-67, col 10, lines 1-67**), the assignment scheme prioritizing each of multiple other resources that provide the service and that are available, based on a processing load of a corresponding module providing the other resource and removing the module and resource having detected a fault from further use [**Figs 1-5, col 4, lines 53-67, columns 5-14, lines 1-67**].

Regarding claim 19, Asthana et al. disclosed a system for multiplexing a specialized resource (**redundant components**) of a network peripheral comprising of a plurality of modules that have specialized resources (**item 93 of Fig 3**), and a plurality of processors (**items 98 and 100 of Fig 3**) that control the plurality of modules and,

wherein the plurality of processors can replace any one of the plurality of modules experiencing a defect with any other of the plurality of modules, wherein a particular module selected to replace a defective module is selected in accordance with respective processing loads (**data transfer**) of the plurality of modules **[Fig 3, col 7, lines 65-67, col 8-10, lines 1-67, col 11, lines 1-19]**.

Response to Arguments

6. Applicant's arguments with respect to claims 1-4,6-12,14,15,17-19 have been considered but are moot in view of the new ground(s) of rejection. Claims 5,13,16,20 are cancelled.

7. Amendments to specification (see pp 2-3) filed on 1/18/2006 are accepted by the examiner.

Conclusion

8. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached @ (571)-272-3139. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Venkatesh Haliyur

Patent Examiner *M*

03/28/06

Ricky Q. Ngo
RICKY Q. NGO
SUPERVISORY PATENT EXAMINER